

**Steven McGee Construction  
Kennebec County  
Augusta, Maine  
A-886-71-C-A (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #2**

After review of the air emission license amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

1. Steven McGee Construction (SMC) located in Augusta, Maine was issued Air Emission License A-886-71-A-N on May 14, 2004 permitting the operation of emission sources associated with their crushed stone and gravel facility. The license was subsequently amended on April 27, 2005 (A-886-71-B-A).
2. SMC has requested an amendment to their license in order to add a new crusher and power plant to their license as well as increase the facility's annual fuel limit.

**B. Emission Equipment**

The following new equipment is addressed in this air emission license

**Rock Crushers:**

<u>Designation</u>	<u>Powered</u>	<u>Process Rate</u> <u>(tons/hour)</u>	<u>Control Device</u>	<u>Date of</u> <u>Manufacture</u>
Crusher #3	electrical	400	Spray Nozzles	2005

**Diesel Units:**

<u>Source ID</u>	<u>Max. Capacity</u>	<u>Max. Firing Rate</u>	<u>Power Output</u>	<u>Fuel Type, % sulfur</u>
Generator #3	2.1 MMBtu/hr	15.3 gal/hr	300 Hp	diesel fuel, 0.05%

### C. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Sig. Level</u>
PM	0.1	0.3	+0.2	100
PM <sub>10</sub>	0.1	0.3	+0.2	100
SO <sub>2</sub>	0.1	0.1	--	100
NO <sub>x</sub>	3.0	9.1	+6.1	100
CO	0.7	2.0	+1.3	100
VOC	0.2	0.7	+0.5	50

This modification is determined to be a minor modification and has been processed as such.

With the fuel limit on Generators #1, #2, and #3 the facility is licensed below the major source thresholds and is considered a synthetic minor.

## II. BEST PRACTICAL TREATMENT

### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### B. Crusher #3

Crusher #3 is a portable unit which was manufactured in 2005. This unit has a maximum process rate of 400 ton/hr. Crusher #3 is therefore subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater

than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

The regulated pollutant from rock crushers is particulate emissions. To meet the requirements of Best Practical Treatment (BPT) for control of particulate matter (PM) emissions from Crusher #3, SMC shall maintain water sprays on the rock crusher and operate as needed to control visible emissions. Visible emissions from Crusher #3 shall be limited to no greater than 10% opacity on a six (6) minute block average basis.

C. Generator #3

Generator #3 is used primarily to provide electrical power to Crusher #3.

A summary of the BACT analysis for Generator #3 is the following:

1. The total fuel use for Generators #1, #2, and #3 combined shall not exceed 30,000 gal/year of diesel fuel with a maximum sulfur content not to exceed 0.05% by weight.
2. Chapter 106 regulates fuel sulfur content, however in this case a BACT analysis for SO<sub>2</sub> determined a more stringent limit of 0.05% was appropriate and shall be used.
3. The PM and PM<sub>10</sub> limits are derived from Chapter 103.
4. NO<sub>x</sub>, CO, and VOC emission limits are based upon AP-42 data dated 10/96.
5. Visible emissions from the generators shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

D. Facility Emissions

SMC shall be restricted to the following annual emissions:

**Total Licensed Annual Emissions for the Facility**  
(used to calculate the annual license fee)

	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Generators	0.3	0.3	0.1	9.1	2.0	0.7
<b>Total TPY</b>	<b>0.3</b>	<b>0.3</b>	<b>0.1</b>	<b>9.1</b>	<b>2.0</b>	<b>0.7</b>

## ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-886-71-C-A, subject to the conditions found in Air Emission A-886-71-A-N, amendment A-886-71-B-A, and in the following conditions:

**The following shall replace Condition (16) of Air Emission License A-886-71-A-N and A-886-71-B-A:**

**(16) Rock Crushers**

- A. SMC shall maintain spray nozzles for particulate control on the primary and secondary rock crushers and Crusher #3 and operate them as necessary to limit visible emissions to no greater than 10% opacity on a six (6) minute block average basis. [MEDEP Chapters 115 (BPT) and 101]
- B. SMC shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]
- C. SMC shall maintain a log detailing and quantifying the hours of operation on a daily basis for the primary and secondary rock crushers and Crusher #3. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]

**The following shall replace Condition (17)(A) of Air Emission License A-886-71-A-N and A-886-71-B-A:**

**(17) New Source Performance Standards for rock crushers**

- A. The primary and secondary crushers and Crusher #3 are subject to 40 CFR Part 60 Subparts A and OOO and SMC shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).

The following shall replace Condition (18) of Air Emission License A-886-71-A-N and A-886-71-B-A:

(18) **Generators**

- A. Total fuel use for Generator #1, #2, and #3 combined shall not exceed 30,000 gal/yr of #2 fuel oil with a maximum sulfur content not to exceed 0.05% by weight. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and the percent sulfur of the fuel. [MEDEP Chapter 115, BPT]
- B. Emissions shall not exceed the following [MEDEP Chapter 115, BPT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.34	0.34	0.14	12.39	2.67	0.98
Generator #2	0.18	0.18	0.08	6.66	1.43	0.53
Generator #3	0.25	0.25	0.11	9.26	2.00	0.74

- C. Visible emissions from Generators #1, #2, and #3 shall each not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAVID P. LITTELL, COMMISSIONER

**The term of this amendment shall be concurrent with the term of Air Emission License A-886-71-A-N.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/12/06

Date of application acceptance: 7/13/06

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Lynn Ross, Bureau of Air Quality.